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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/477,700	01/06/2000	WALTER P. SJURSEN	2506.1008001	9604

21005 7590 06/25/2004

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EXAMINER

NGUYEN, TUAN DUC

ART UNIT	PAPER NUMBER
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2643

17

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/477,700

Applicant(s)

SJURSEN ET AL.

Examiner

Tuan D. Nguyen

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-39 and 91-95 is/are pending in the application.
- 4a) Of the above claim(s) 1-35, 40-90 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 36-39 and 91-95 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 36-39 and 91-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent number 4,533,795 (Baumhauer, Jr. et al) in view of U.S. patent number 6,366,678 (Madaffari et al) and further in view of 6,456,720 (Brimhall et al) .

Regarding claim 36, 37, and 91-95, Baumhauer, Jr. et al discloses a hearing aid comprising: a hearing aid enclosure (column 1 lines 11-15 and column 10 lines 13-29); a housing of lateral width "W" and longitudinal length "L" disposed at a proximal end of said enclosure (see figure 1), a transducer formed of a diaphragm (14) comprising an electrically conductive membrane disposed opposite a conductive backplate (17), said membrane and diaphragm extending in a plane parallel to and proximate to and opposite a faceplate (20) of said enclosure having sound openings (20) formed through said faceplate.

Baumhauer, Jr. et al does not disclose the housing and a printed circuit board (PCB) being configured to provide an electromagnetic interference (EMI) shield around the transducer.

However, the printed circuit board and the electromagnetic interference (EMI) shield are well known in the art. For instant, Madaffari et al teaches microphone assembly for hearing aid including a metal housing and a PCB with an EMI ground shield (column 1 lines 50-67 and column 2 lines 1-7). Brimhall et al discloses the use of a metal enclosure is best for shielding from EMI (column 3 lines 42-52). Baumhauer, Jr. et al also teaches EMI shielding means for an integrated electroacoustic transducer (column 9 lines 34-64).

Therefore, it would have been obvious to a one ordinary skill in the art at the time of the invention was made to use these well known PCB and EMI shield for electrical components to process signals generated by said transducer provided on said PCB to easily assembly and to reduce EMI noises.

Regarding claims 38-39, Baumhauer, Jr. et al does not disclose a dimension.

However, Baumhauer, Jr. et al does not restrict to any specific dimension. Therefore, it would have been obvious to a one ordinary skill in the art at the time of the invention was made to modify the dimension in order to obtain a specific acoustic effect for a different application.

Response to Amendment

3. Applicant's arguments filed on 04/27/2004 have been fully considered but they are not persuasive. Regarding the applicant's argument on page 20 lines 1-2, "Baumhauer does not teach or suggest a housing and a printed circuit board configured to provide an electromagnetic interference shield around a transducer". The examiner respectfully disagrees. The cited art does teach the EMI shielding means for a transducer (Baumhauer, column 9 lines 34-64). But Baumhauer does not disclose a printed circuit board to be configured with a housing for providing an electromagnetic interference shield around a transducer. However, the printed circuit board is well known in the art and the EMI shield is also well known in the art. For instant, Madaffari et al teaches microphone assembly for hearing aid including a metal housing and a PCB with an EMI ground shield (column 1 lines 50-67 and column 2 lines 1-7). Therefore, it would have been obvious to a one ordinary skill in the art at the time of the invention was made to use these well known PCB and EMI shield for electrical components to reduce EMI noises.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan D. Nguyen whose telephone number is (703) 305-7168. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (703) 305-4708.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2643

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TDN
6/16/04


CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600